

CLAIMS

What is claimed is:

1. A method for efficiently recovering from a system error in a communication system having a system bus, comprising:
 - storing commands or data to be transmitted from a transmitting entity or being received in a receiving entity in a local nonvolatile memory in the transmitting or receiving entity; and
 - executing a recovery sequence upon detection of the system error to re-initialize the system bus without a need to regenerate or re-transmit the commands or data stored in the local nonvolatile memory at the time of the system error.
2. The method as recited in claim 1, further comprising:
 - storing error information generated in the transmitting or receiving entity in the local nonvolatile memory of the transmitting or receiving entity; and
 - executing the recovery sequence upon detection of the system error to re-initialize the system bus without the need to first read out the error information from the local nonvolatile memory.
3. A method for efficiently recovering from a system error in a communication system having a system bus, comprising:
 - storing error information generated in a transmitting entity or receiving entity in a local nonvolatile memory in the transmitting or receiving entity; and
 - executing a recovery sequence upon detection of the system error to re-initialize the system bus without a need to first read out the error information from the local nonvolatile memory.
4. A test system having a system bus and capable of efficiently recovering from a system error, comprising:
 - a first local nonvolatile memory in a first test entity for storing commands or data to be transmitted or received; and

a processor programmed for executing a recovery sequence upon detection of the system error to re-initialize the system bus without a need to regenerate or re-transmit the commands or data stored in the first local nonvolatile memory at the time of the system error.

5. The test system as recited in claim 1, the first local nonvolatile memory for further storing error information generated in the first test entity; and

the processor further programmed for executing the recovery sequence upon detection of the system error to re-initialize the system bus without the need to first read out the error information from the first local nonvolatile memory.

6. A test system having a system bus and capable of efficiently recovering from a system error, comprising:

a first local nonvolatile memory in a first test entity for storing error information generated in the first entity; and

a processor programmed for executing a recovery sequence upon detection of the system error to re-initialize the system bus without a need to first read out the error information from the first local nonvolatile memory.

7. The test system as recited in claim 1, wherein the first test entity is a transmitting entity, the test system further comprising:

a second local nonvolatile memory in a receiving entity for storing commands or data to be received;

wherein the processor is further programmed for executing a recovery sequence upon detection of the system error to re-initialize the system bus without a need to regenerate or re-transmit the commands or data stored in the first or second local nonvolatile memory at the time of the system error.

8. The test system as recited in claim 7, wherein the transmitting entity and receiving entity, as a pair, is selected from the group consisting of a module and a system controller, a module and a site controller, two site controllers, two modules, or a site controller and a system controller.